

DISCRETE 2014: Fourth Symposium on Prospects in the Physics of Discrete Symmetries



Tuesday 2 December 2014 - Saturday 6 December 2014

King's College London, Strand Campus

Scientific Programme

In addition to the traditional discrete-symmetry-related topics, in this fourth edition of DISCRETE 2014 at King's College London we also celebrate the 150th anniversary of the publication of Maxwell's equations, while James Clerk Maxwell was the Professor of Natural Philosophy here. Moreover it is the 60th Anniversary of the discovery of Yang-Mills Gauge theories, the 50th anniversary of the discovery of CP Violation and the 50th anniversary of the proposal of Bell's Inequalities in Quantum Physics. Hence DISCRETE 2014 can be combined with the celebration of the above anniversaries.

T, C, P, CP symmetries

Accidental symmetries (B, L conservation)

CPT symmetry, decoherence and entangled states

Lorentz symmetry breaking (phenomenology and current bounds)

Neutrino mass and mixing

Neutrinos in cosmology and astroparticle physics

Dark matter searches

Experimental results from and prospects at LHC and new facilities.

Cosmological aspects of non-commutative space-times

PT symmetric (non-Hermitian) Hamiltonians

Strongly Coupled Gauge Theories

Bell Inequalities in Quantum Physics

Supersymmetry/Supergravity/Strings and Branes

Higgs Physics at LHC and Beyond